

ABSTRACT OF THE DISCLOSURE

A sense node voltage relating to light intensity incident upon a light-detecting element is measured. To realize this measurement, a first integration reset pulse is generated to enable a resetting of the sense node voltage to a voltage value substantially equal to a reset voltage value associated with the first integration reset pulse, an edge of the first integration reset pulse triggering a beginning of a first integration period. Thereafter, a second integration reset pulse is generated to enable a resetting of the sense node voltage to a voltage value substantially equal to a reset voltage value associated with the second integration reset pulse, an edge of the second integration reset pulse triggering a beginning of a second integration period. Subsequent to the generation of the first integration reset pulse and prior to the generation of the second integration reset pulse, a plurality of intra-period reset pulses is generated to enable resetting of the sense node voltage to a plurality of voltage values, each voltage value being substantially equal to a reset voltage value associated with the generated intra-period reset pulse. The sense node voltage generated in response to incident light intensity is measured only once during an integration period, wherein this measurement takes place subsequent to the generation of the plurality of intra-period reset pulses and prior to the generation of the second integration reset pulse.